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SUB E1)

2. (Amended) The isolated polynucleotide of claim 1, wherein the polynucleotide is a DNA sequence.

3. (Amended) The isolated polynucleotide according to claim 1, wherein the coding sequence encodes the amino acid sequence of SEQ ID No. 2.

4. (Amended) The isolated polynucleotide according to claim 1, wherein the polynucleotide is coding sequence of SEQ ID No. 1.

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SUB E2)

8. (Amended) A chimeric gene comprising the polynucleotide according to claim 1 operably linked to regulatory sequences that allow expression of the coding sequence in a host cell.

9. (Amended) The chimeric gene according to claim 8 wherein the regulatory sequences allow expression of the coding sequence in a plant cell.

SUB E3)

10. (Amended) A vector comprising the polynucleotide according to any one of claims 1 to 4 or the chimeric gene according to claim 8 or 9.

11. (Amended) The vector according to claim 10 which is an expression vector.

12. (Amended) A cell transfected with the vector according to claim 10.

13. (Amended) The cell according to claim 12, wherein the cell is selected from the group consisting of a prokaryotic cell and a plant cell.

14. (Amended) A cell, having integrated into its genome, the chimeric gene according to claim 8.

15. (Amended) The cell according to claim 14, wherein the cell is a plant cell.

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SUB E4)

20. (Amended) A method of obtaining a transgenic plant cell comprising:
(a) transforming a plant cell with the expression vector according to claim 11 to obtain a transgenic plant cell, and optionally,

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(a') transforming the cell with one or more further polynucleotide sequences coding for a GST subunit, operably linked to regulatory elements that allow expression of the subunit in the cell.

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21. (Amended) A method of obtaining a first-generation transgenic plant comprising:

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(a) transforming a plant cell with the expression vector according to claim 11 to obtain a transgenic plant.

22. (Amended) A method of obtaining a transgenic plant seed comprising:

Sub E4
(a) obtaining a transgenic seed from the transgenic plant obtained by step (a) of claim 21.

C4 *Sub E5*
25. (Amended) A transgenic plant cell obtained by the method according to claim 20.

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29. (Amended) A nucleic acid construct comprising:

Sub E6
(a) the isolated polynucleotide according to claim 1 operably linked to regulatory elements that allow expression of the coding sequence in a plant cell; and
(b) a site into which a further polynucleotide comprising a coding sequence can be inserted.

30. (Amended) The nucleic acid construct according to claim 29, wherein the site of step (b) is bounded by regulatory elements that allow expression of a coding sequence inserted at the site in a plant cell.

31. (Amended) A vector comprising the nucleic acid construct according to claim 29.

Sub E2
32. (Amended) A method of transforming a plant cell or of obtaining a plant cell culture or transgenic plant, the method comprising:

(a) providing an untransformed plant cell which is susceptible to a herbicide whose herbicidal activity is reduced by a dimeric protein comprising two GST subunits;

- C5 could
- (b) transforming the plant cell with the vector according to claim 29;
- (c) cultivating the transformed cell under conditions that allow the expression of the polynucleotide encoding a GST subunit to provide a polypeptide comprising a GST subunit, wherein the polypeptide comprising the GST subunit can form a dimer with another GST subunit; and/or
- (c') regenerating the cell to give a cell culture or plant such that the polynucleotide is expressed to provide a polypeptide comprising a GST subunit, wherein the polypeptide comprising the GST subunit can form a dimer with another GST subunit;
- (d) contacting the cell, cell culture or plant with the herbicide whose herbicidal activity is reduced by the dimeric protein, and to which the untransformed plant cell was susceptible, and
- (e) selecting cells, cell cultures or plants that are less susceptible to the herbicide than are corresponding untransformed cells, cell cultures or plants.

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43. (Amended) A method of controlling the growth of weeds at a locus where a transgenic first-generation plant or transgenic progeny plant according to claim 25 is being cultivated, which method comprises applying to the locus a herbicide whose herbicidal properties are reduced by a dimeric GST protein.

Please add the following new claims:

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66. (NEW) An isolated polynucleotide having a coding sequence which hybridizes to the coding sequence of SEQ ID No. 1 or to its complement at from about 50° C to about 60° C in the presence of 0.03 M sodium chloride and 0.03 M sodium citrate.

67. (NEW) An isolated polynucleotide having a coding sequence which hybridizes to the coding sequence of SEQ ID No. 1 or to its complement at about 60° C in the presence of 0.03 M sodium chloride and 0.03 M sodium citrate.

68. (NEW) An isolated polynucleotide having a coding sequence at least 70% identical to the coding sequence of SEQ ID No. 1 or its complement.

69. (NEW) The isolated polynucleotide of claim 68 having a coding sequence is at least 80% identical to the coding sequence of SEQ ID No. 1 or its complement.

70. (NEW) The isolated polynucleotide of claim 69 having a coding sequence at least 90% identical to the coding sequence of SEQ ID No. 1 or its complement.

71. (NEW) The isolated polynucleotide of claim 69 having a coding sequence at least 95% identical to the coding sequence of SEQ ID No. 1 or its complement.

72. (NEW) The isolated polynucleotide of claim 69 having a coding sequence at least 98% identical to the coding sequence of SEQ ID No. 1 or its complement.

73. (NEW) The isolated polynucleotide of claim 69 having a coding sequence at least 99% identical to the coding sequence of SEQ ID No. 1 or its complement.

74. (NEW) An isolated polynucleotide having a nucleic acid sequence at least 95% identical to at least about 60 contiguous nucleotides of SEQ ID No. 1 or its complement.

75. (NEW) The isolated polynucleotide of claim 74 having a nucleic acid sequence at least 95% identical to at least about 100 contiguous nucleotides of SEQ ID No. 1 or its complement.

76. (NEW) The isolated polynucleotide of claim 75 wherein the nucleic acid sequence is at least 99% identical to at least about 100 contiguous nucleotides of SEQ ID No. 1 or its complement.

77. (NEW) A first generation transgenic plant produced by the method according to claim 21.

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conclude
Sub E11
78. (NEW) A ~~plant seed or progeny~~ plant produced by the a method according to claim 22.

79. (NEW) ~~An~~ isolated polynucleotide comprising the coding sequence of SEQ ID NO:1 or allelic variants thereof.

80. (NEW) An isolated polynucleotide encoding a polypeptide having a sequence of SEQ ID NO:2 modified by up to about 30 conservative amino acid substitutions.

IN THE SPECIFICATION

Please rewrite the title as follows:

[NEW PLANT GENES] GLUTATHIONE TRANSFERASE NUCLEIC ACIDS, POLYPEPTIDES, TRANSGENIC PLANTS AND METHODS OF USE THEREOF

Please add the following abstract after page 70 of the specification:

WE
This invention relates to glutathione transferase (GST) subunits, to nucleic acid sequences encoding glutathione transferase subunits, and to uses of these glutathione transferases and coding sequences, especially in the field of plant biotechnology.

REMARKS